

Matanuska River Terrace Erosion Area Acquisition Pilot Project

Draft

ENVIRONMENTAL ASSESSMENT



NATURAL RESOURCES CONSERVATION SERVICE

APRIL 5, 2006

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Matanuska River Terrace Erosion Area Acquisition Project

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ENVIRONMENTAL ASSESSMENT

This document is being prepared to assess the socioeconomic and environmental impacts of a voluntary acquisition project for the highest impacted residences and/ or business properties, within the project area, against a no action alternative. Other alternatives, such as dikes, dams, levies, or other structural measures are specifically not considered as a feature of this proposed action.

Purpose and Need

The purpose of the project is to provide a non-structural method to control or eliminate water contamination, potential impairment of anadromous fish migration, river terrace and riparian corridor alteration/destruction, loss of private residential buildings and businesses and potential human harm from riverbank erosion adjacent to the Matanuska River, by reducing the amount of residential and business property directly affected in the subject area.

This property acquisition project is desirable to alleviate erosion related damage to some at-risk river terrace residential and business structures, protect against river water-quality contamination and reduce potential in-river building debris in the subject area(s) in 2006. This will be accomplished by offering a voluntary program to selected riverside landowners, to sell their properties to the Matanuska-Susitna Borough (MSB), which would acquire fee simple title to their properties and then demolish and/ or remove buildings and other susceptible infrastructure from the terrace erosion area. The acquisition sites would be restored to more natural terrace and riparian functions and values. Additionally, this would potentially reduce other recurring erosion related losses (i.e., public service and maintenance) and relieve emergency and public utilities workers from often annual assistance to vulnerable landowners. In some cases this could reduce or eliminate the risk to participants and others for loss of life during threatening erosion events.

Proposed Action

The proposed action is for the MSB to acquire fee simple title to eligible selected properties within the project areas described below. Participation by the landowner is strictly voluntary. All real property acquisition will be made at appraised fair market value in accordance with the Federal Acquisition Regulations. Applications for assistance will be ranked in accordance with the criteria agreed upon by the MSB and the Natural Resources Conservation Service (NRCS) (Appendix C). The highest ranked property, as determined by NRCS, will be acquired first according to criteria parameters. Acquisitions will be limited to available federal funding (\$594,000). All property acquired under this project will have the

structures demolished and/or removed; wells, septic systems, and underground storage tanks decommissioned or removed as required by State law; and the site restored to support natural terrace and riparian values and functions, in perpetuity. A Cooperative Agreement between MSB and NRCS will be reached that defines the roles and responsibilities of each organization for pre- and post implementation. Covenant Stipulations (Attachment B) will be placed on each acquired property designating allowable land use and management.

Project Area

The project area is located on the banks of the Matanuska River and is divided into two areas. Area 1 (Appendix A) is on the north bank commencing at the confluence of Kings River in Sec. 16, T.19 N., R. 04 E., Seward Meridian and extends westward to the westernmost boundary of Harickmans Riverview Estates subdivision in Sec. 26, T. 19 N., R. 03 E., Seward Meridian. Area 2 is located on the south bank commencing at the Triple Crown Subdivision in S. 14 T. 17 N., R. 20 E., Seward Meridian and extends westward to the western most boundary of the Circle View Subdivision in Sec. 21, T. 17 N., R 20 E., Seward Meridian.

In 1992, four spur dikes were constructed near the Circle View Subdivision (in Area 2). A fifth dike is currently being planned for installation just downstream in the same vicinity. The four dikes in place have arrested riverbank erosion and protected the adjacent homeowners to a large degree, in their area of influence. Properties in the area of influence of the existing four spur dikes are not eligible for this project. The excluded area is shown on the attached map for Area 2 (Appendix A). The proposed fifth spur dike is planned for installation south and adjacent to the existing four spur dikes in the fall of 2006.

The existing conditions and resource concerns at the project site areas are found inside the alternative comparison table later in this document.

Alternatives Considered But Not Developed in Detail

A number of alternatives, both structural and non-structural in nature, have been considered to address the erosion related problems on the Matanuska River. In August 2003, the U.S. Army Corps of Engineers undertook a preliminary investigation of various structural measures, as well as relocation of property owners out of the erosion area. Additionally, a Matanuska River Erosion Study suggesting alternative recommendations was performed for NRCS in 2004 (MWH Report, 2004). Although none of these alternatives were studied in detail, it is useful to examine the preliminary findings. One finding to date is that structural measures may reduce erosion in the area but have very high negative cost/benefit ratios and high environmental impact concerns. And, Structural measures are very expensive since they are vulnerable to the erosive forces of the Matanuska River, requiring armoring and high ongoing maintenance costs. Due to high costs (each spur dike is estimated to cost \$625,000), limited area

protections, long time frame for study and implementation, and potential detrimental ecological impacts, structural measures were not developed.

Structural control measures in and adjacent to rivers, also present inherent technical, economic and social concerns regarding the continuing use of public funds to relieve/compensate private landowner losses for what is largely believed to be avoidable personal actions. This is especially true where young glacially driven natural river systems need to geomorphically adjust to widely varying environmental and climatic conditions. Braided river systems such as the Matanuska River, need the ability to move laterally carrying water flows and sediment loads, developing an energy balance. State and Federal government conservation and permitting agencies, contemporary political leadership and others are increasingly requiring local administrative procedures as remedy for site treatment, in lieu of structural protection features, to be utilized in addressing these river resource and human concerns.

Description of Alternatives Considered

No Action

Under the No Action alternative, current erosion induced problems will persist. Homes and businesses are and will continue to be at high risk for damage or destruction. Emergency and public utilities workers in the performance of required assistance will continue to risk life and health in some circumstances, to provide services within budgeted allowances. Risk of loss of life will remain relatively unchanged or could possibly worsen as the Matanuska River continues its migration toward existing buildings. Federal, State and local emergency agencies, private insurance companies and individuals will incur costs of recovery. Anadromous fish populations will remain potentially negatively impacted by built-environment structural debris. Water quality will remain threatened by active fuel storage tanks, septic system collapse, and the potential for hazardous contamination from unknown household substances.

Cumulative Impacts

The cumulative impacts of the No Action alternative consist of both short - and long-term effects. In one scenario, a “no action” effect would generally sanction unfettered development adjacent to the river in the floodplain and terrace area. If no restrictions are implemented, the short-term effects would be the continued danger for property damage as a result of erosion activities. In the long-term, potentially as more structures, features and buildings fall into the river, there will be equivalent economic and social hardships as insurance rates rise to off-set losses. There will be an increasing call for State and Federal intervention for rescue of affected sites by emergency personnel as well as requests for streambank and river structural mechanisms to attempt to protect perceived high-risk erosion areas, utilizing such engineering features as rip-rap and spur dikes. Increasing pressure will come to bear on local, State and Federal manpower and on public financial resources to address these loss issues.

Environmentally, buildings, septic systems, fuel storage tanks, and a wide variety of commercial and household toxins will be added to Matanuska River water, imperiling fisheries and wildlife populations as well as downstream water users.

The other general option for the future without the project is the MSB Administration will propose to the Borough Assembly, an ordinance that would implement a suite of administrative actions to limit development of the riparian, floodplain and at-risk terrace erosion areas adjacent to the river. The MSB is interested in implementing these administrative features, as it is increasingly aware that structural measures extending into the river and providing only limited area protection, are considerably out of favor with State and Federal regulatory agencies as well as with State and Federal lawmakers who have assisted in acquiring funds for such limited area treatments (i.e. spur dikes). Part of the Borough's strategy is to enact zoning codes, restricting allowable activities adjacent to the river. With these provisions in place, future building and development within these areas would likely be constrained to conditions not requiring extraordinary and expensive emergency measures, and therefore the cost of property damage prevention from erosion would be expected to be borne by the private citizen.

Without strong Borough initiated zoning codes, the river terrace area would continue to be developed with the high risk of continued erosion and damage to property. Zoning ordinances alone will not reduce the pre-existing risk associated with the current on-going erosion problem. Acquisition of the high risk properties would mitigate the danger of personal property damage and restore the natural riverine values on the properties acquired. Removing the structures would also save Borough funding currently spent on emergency services. Borough funds would be decreased due to the loss of tax revenue on the acquired lands and structures.

In each No Action project scenario, several residential homes with septic appurtenances and some actively used fuel tanks and other hazardous features will still be subject to loss. Lives will still be endangered and water pollution will occur as high water erodes the terrace and erosion area and affects residence and business structures in the 2006 high water year.

Residual Impacts

Residual impacts are those that remain, whether positive or negative, after the implementation of appropriate mitigating measures. The residual impacts of the proposed action would include the Boroughs on-going expense to manage the acquired lands and the loss of property tax revenue for the Borough on the acquired lands. The Borough would, however, theoretically save revenue on emergency services. An acquisition without structural measures would not reduce the erosion itself, only its impact to homeowners and business.

Terrace Acquisition - Preferred Alternative

As an alternative to structural erosion proofing measures, fee title acquisition by the Matanuska-Susitna Borough of the most severely threatened homes and businesses is proposed. The project would focus on acquiring the most vulnerable properties on a voluntary basis by offering the landowner's fair market value for their property. Interested landowners would apply for participation in the program and the highest priority properties, as determined by ranking criteria, would be acquired relative to available funding (see below). Buildings and other facilities would be demolished and removed from each acquired site. The property would be vegetatively restored and maintained in perpetuity as terrace and riparian land use, unless otherwise accommodated by an NRCS compatible use agreement. Construction of buildings for human use or occupancy and other uses that are incompatible with the natural terrace and riparian function would not be allowed. A Restrictive Covenant governing allowable uses and management providing NRCS oversight would be recorded and filed with the Borough-acquired fee title deed. The MSB would retain fee title to the acquired properties, while elements of the Borough-NRCS agreement and Restrictive Covenant would provide vegetative restoration and ecologic stabilization of the at-risk terrace and riparian erosion area. This alternative will not entrain or otherwise restrict the Matanuska River from eroding and/or claiming the acquired property area(s) in its natural geomorphic adjustments. No engineered features or measures would be installed into or adjacent to the river corridor.

| ESTIMATED TOTAL COSTS - Federal - \$594,000

Effects of Alternatives

The following table presents the Existing Conditions for a number of ecological, economic and social concerns and analyzes a variety of special environmental concerns that must be addressed as a requirement of National Environmental Policy Act (NEPA) and NRCS policy. The effects of the No Action and Terrace Erosion Area Acquisition Project alternatives are compared. When analyzing effects, temporary, direct, indirect and cumulative effects are all considered and presented.

<p style="text-align: center;">Comparison of Effects of Alternatives Matanuska River Terrace Erosion Area Acquisition Pilot Project</p>			
	Existing Conditions	No Action (future without project action)	Terrace Acquisition (preferred Alternative)
Planned Measures	Riverbank erosion causes residential and business structures to be at risk for loss by annual river movement.	Continued development will place more improved properties at risk from the river erosion process.	Acquire about 3-4 homes and businesses and restore terrace and riparian function.
Surface Water Quality	<p>Nominal for lawn and garden herbicide and pesticide use. No known excessive applications that contribute to any current resource problems.</p> <p>Possibility of contamination of surface water through improperly functioning septic systems or leaking fuel tanks. A salvage yard near MP 65 of the Glenn Highway is a potential high risk contaminant to both groundwater and surface water.</p>	Increased possibility of contamination of surface water through improperly functioning septic systems or leaking fuel tanks as more properties are developed. A salvage yard near MP 65 is a potential high risk contaminant to both groundwater and surface water with contamination of potential carcinogens.	<p>Reduced likelihood for contamination due to removal of some homes, septic systems, and fuel tanks. This would only apply to acquired properties.</p> <p>The salvage yard will not be eligible for the acquisition program due to restrictions on the use of federal funds in acquiring liabilities with high potential for toxic contamination.</p>
Surface Water Quantity/ Flooding	For water quantity, no current impact. Occasional flooding of area due to flood flows, ice jams, augeis (i.e., ice that is created by overflow action), and extremely high ground water levels related at times to high river flows.	No change.	Acquisition of improved properties would remove any potential for flood damages or water quantity issues for the acquired properties.
Ground Water	<p>In the Circle View project area ground water tables average 80 ft. There are no identified ground water resource issues in Circle View.</p> <p>In the Sutton area ground water depth averages 8 ft. Ground water contamination from septic systems and adjacent properties possibly exist.</p>	With no project activity the potential for increasing groundwater contamination is expected to increase with more development in both project areas.	Reduced potential for groundwater contamination by removal of residential and business structures on some properties, including the sealing and decommissioning of wells, septic systems and fuel tanks.
Water Based Recreation	Matanuska River is used for rafting, kayaking and other non-motorized activities in summer and for snow machine travel and recreation in winter.	As population growth in the river corridor increases, so will the interest and use of the river for the identified purposes in the "existing conditions" section.	Project will have no impact on water based recreation.
Floodplain Urbanization	Currently there are about 32 properties with houses and other structures within the Matanuska River corridor in the two project areas.	Development is continuing in the project area and the terrace corridor will be increasingly utilized for residential and business properties, which will further complicate the natural function of the river.	Three to four residential and business properties will be removed from the terrace corridor in the project area. This will promote natural river processes, riparian and terrace corridor functions in these areas.

<p style="text-align: center;">Comparison of Effects of Alternatives Matanuska River Terrace Erosion Area Acquisition Pilot Project</p>			
	Existing Conditions	No Action (future without project action)	Terrace Acquisition (preferred Alternative)
Land Use Changes	Current land use is a mix of natural areas and rural residential and business properties .	Development of the area will continue and the general land use patterns in the area will slowly tip toward rural residential and business sites and less toward natural areas.	Three to four rural properties will be converted from residential/ business land use to perpetual undeveloped native landscape.
Aquatic Resources	Primary aquatic resources in the area consist of Kings River, Granite Creek, and the Matanuska River.	No change.	No change.
Terrestrial and Fishery Wildlife Resources	<p>Area is frequently used by wildlife including moose, marten, fox, squirrel, grouse, bald eagles, goshawks, passerine birds, waterfowl and a variety of other species.</p> <p>The river corridors along the project areas are used extensively by all phases of migrating king, silver and sockeye salmon.</p>	<p>As human populations and use increases from building and development, there will be continued clearing of native vegetation, increasing habitat fragmentation and disturbance by humans. This will reduce use and appeal to almost all varieties of native species except those easily habituated to human encroachment.</p> <p>There will be a continued potential negative impact to fish migratory corridors as well as resident fish native habitat..</p>	May have a negative short-term impact during demolition of structures but a positive impact for the long term in bringing back native habitat for moose and aquatics and increased use by passerines, goshawks and bald eagles. There will be a reduction in habitat fragmentation and human disturbance. There will also be a beneficial effect since structures and property features (tanks, well casing, etc.) will not be falling into the river.
Public Health and Safety	Public health and safety are currently impaired on a regular basis due to erosion problems of the project area. Continued erosion will result in destruction of homes. Septic tanks, underground storage tanks, and other related material may be swept into the river causing a myriad of other health and safety concerns.	Likely to see an increase in erosion related problems that currently exist. Increasing potential problems identified in the Existing Conditions section as more homes, structures, septic, waste, fuel systems and attendant associated developmental conditions occurs	The planned project will not eliminate the erosion or the accompanying public health and safety issues, but by removing some residential and business properties from the area, the number of people, structures and facilities affected by the erosion will be reduced.
Forest Resources	Project area currently not used for commercial timber production.	Minor deleterious effect on the forest resource due to continued clearing of lots in order to construct residential properties.	Residential and business sites that are currently vegetatively cleared, will be planted or allowed to naturally return to a wooded terrace or riparian area.

Comparison of Effects of Alternatives

Matanuska River Terrace Erosion Area Acquisition Pilot Project

	Existing Conditions	No Action (future without project action)	Terrace Acquisition (preferred Alternative)
Air Quality	The Borough receives data from an air quality monitoring station located on the Butte in the Circleview Estates area. As a general rule there is a possibility for impaired air quality during temperature inversions, forest fires, or strong winds blowing particulates across the Matanuska River valley.	Possibility of a deterioration of air quality due to additional homes utilizing wood for heat. It is unlikely that this change in air quality would be substantial.	Possibility of slight improvement in air quality due to a reduction in residential homes and business being heated with wood and by revegetating woody species on acquired properties, which should provide a very minor improvement by limiting sources for airborne particulates during high winds.
Social Issues	Development has occurred in these areas because of the location adjacent to the river, riverine viewsheds, front-door access to river frontage, rustic rural remote location and for economic reasons related to property values being more attractive.	There would likely be continued interest by people wanting to locate to these sites, but the danger of property loss due to riverbank erosion would still be in place.	Due to multiple or high-dollar mortgages on some properties, and the high potential cost of purchasing a home elsewhere in the Borough, it is possible that some lower or fixed income families or individuals may not feel financially able to participate in the property acquisition project.
Public Utilities/ Services	Residential infrastructure is in place including roads and utilities.	As the population grows and development increases along the river, more infrastructure will be required to support these developments.	No effect on the public roads or utilities, but fewer people will be affected due to fewer inhabitants remaining in the project area. As properties are acquired and structures decommissioned, there may be no need to maintain public infrastructure requirements to the specific project acquisition sites.
Clean Water Act, Waters of the U.S. including Special Aquatic Sites	Not applicable.	Not applicable. No expected activities in wetland areas subject to U.S. Army Corps Of Engineers 404 regulations.	No dredge or fill activities will be conducted in waters of the U.S. including wetlands or in special aquatic sites.
Coastal Zone Management Areas	All project areas lie within Alaska designated Coastal Zone Management Areas	Continuing development along the Matanuska River will add more dwellings and commercial and business ventures subject to control under the Coastal Zone Management Areas.	Project implementation will remove 3-4 selected properties from impacting potential resource concerns associated with the Coastal Zone Management Areas.

Comparison of Effects of Alternatives

Matanuska River Terrace Erosion Area Acquisition Pilot Project

	Existing Conditions	No Action (future without project action)	Terrace Acquisition (preferred Alternative)
Cultural Resources	UNKNOWN AT THIS TIME Will be updated during the public comment period.	UNKNOWN AT THIS TIME. Will be updated during the public comment period.	UNKNOWN AT THIS TIME. Will be updated during the public comment period.
Environmental Justice	Generally in most cases there are both low cost and high value homes and developments along the river corridor. However, at this time current property valuations may indicate these sites are less expensive to purchase and subsequently have lower tax valuations.	Situation remains the same as the existing condition, unless the MSB enacts ordinances governing costs and tax valuations of living bankside to the river. Although it is expected the Borough would avoid requirements that would negatively impact or specifically impact a certain class of individuals, we cannot perceive all impacts from unknown and currently uncoded procedures.	<p>All people in the project area, including economically disadvantaged groups, minorities, women and persons with disabilities will be eligible to participate in the program. There will be no disproportionately high or adverse human health or environmental impacts to these groups or individuals as a result of the project action.</p> <p>However, some homes will be excluded from participation due to limited funding amounts and by virtue of the presence of the previously constructed spur dikes in the Circleview Estates area.</p> <p>Additionally, as mentioned above in the Social Issues, multiple or high dollar mortgages on some properties, and the high potential cost of purchasing a home elsewhere in the Borough, some lower or fixed income families or individuals may not feel financially able to participate in the property acquisition project</p>
Essential Fish Habitat	No EFH has been designated adjacent to either project eligibility areas	No effect.	No effect.
Floodplain Management	The MSB is in compliance with and participates in federal floodplain management and flood insurance programs	No change	No change.
Fish and Wildlife Coordination Act	Not Applicable	Not applicable.	Not applicable.

Comparison of Effects of Alternatives

Matanuska River Terrace Erosion Area Acquisition Pilot Project

	Existing Conditions	No Action (future without project action)	Terrace Acquisition (preferred Alternative)
Invasive Species	No known invasive species have been found on any of the project site locations investigated.	As development and land clearing take place, it is expected the chances for invasive species introduction would be possible by all the usual dispersal and invasion mechanisms.	Revegetation of the disturbed sites will provide short-term treatment of any species currently unknown, but which may be found. Long term, there is less chance of non-native species invasion as long as native plant species establish, and ground disturbance is minimized.
Migratory Birds	A variety of migratory passerine birds pass through the project area. As lands are cleared of native vegetation, habitat has been lost and fragmented. Migratory waterfowl are not associated with the existing habitat conditions of this project.	Long-term negative impact on migratory passerine species due to increased development in the project area. Land clearing activities associated with development remove resident and migratory passerine habitat and contribute to habitat fragmentation. Migratory waterfowl are not impacted by the no action alternative of this project	The project area will be enhanced for passerines due to reduction in habitat fragmentation and human disturbance. Natural regeneration and active restoration of native vegetation on the acquired project sites will help replace lost trees and shrubs important for migratory passerine species.
Natural Areas	None designated in project area	Not applicable	Not applicable
Prime and Unique Farmland	None in project area.	Not applicable.	Not applicable.
Riparian Areas	Consisting of willows, alder, balsam poplar, aspen and white spruce, approximately 285 acres of riparian and adjacent upland forested woodland acres are contained in the two Terrace Erosion Project eligibility zones	Development will continue in the project area with a likely effect of degrading the riparian corridors due to removal of woody vegetation, habitat disturbance, etc. Depending on parcel size, riparian and adjacent upland forested woodland acres are reduced by 10-70 percent by each new residential or commercial development in the eligibility zones.	Some residential sites will be removed from the riparian zones of the project area. This will help to reduce habitat fragmentation and will promote a naturally sustainable riparian and terrace corridor along the Matanuska River. Between 10 and 40 acres of riparian and adjacent upland forested vegetation will be restored on acquisition property sites within the two eligibility zones.

<p style="text-align: center;">Comparison of Effects of Alternatives Matanuska River Terrace Erosion Area Acquisition Pilot Project</p>			
	Existing Conditions	No Action (future without project action)	Terrace Acquisition (preferred Alternative)
Sole Source Aquifer	Not applicable.	Not applicable.	Not applicable.
Threatened and Endangered Species State Species Of Concern	There are no known resident threatened or endangered species or state species of concern within the project area. The river corridor may serve as a travel route for some ecologically sensitive migratory predatory birds (American Peregrine Falcon, Bald Eagle).	Continued development of project areas as noted above, will remove native woody vegetation fragmenting and reducing foraging and travel corridors due to land clearing and the increased disturbance along the river.	Native terrace and riparian vegetation will be regenerated and restored where necessary, on approx. 10-40 acres. Long-term intensive daily human disturbance will be reduced or eliminated from acquired areas. Eagle nesting sites discovered during project implementation will necessitate seasonal avoidance measures where required by the US Fish and Wildlife Service.
Wetlands	None exist in any potential project location sites.	No effect.	No effect.
Wild and Scenic Rivers	None in project area.	Not applicable.	Not applicable.

Preferred Alternative Benefit Summary

- Reduces potential loss of human life from event-oriented river bank erosion affecting human habitations.
- Removes approximately 3-4 residential homes or businesses and attending structural and building features from certain loss to the Matanuska River in the 2006 calendar year. Landowners of these properties will be compensated fair market value for their properties on a voluntary participation basis.
- Decommissions water wells, public utilities and infrastructure, reducing the damage to these facilities, their repair and maintenance. Eliminates the deposition of structural debris, household and built-environment chemicals and generally inseparable residential toxic materials, into the Matanuska River as a result of structure loss. Thus, providing less potentially polluted or otherwise altered water quality conditions for downstream users and fish and wildlife populations.
- Revegetates native ecological conditions on the terrace and riparian areas of the project sites, restoring function and values of these geomorphic and landscape features. Upland and riparian wildlife habitat will be restored on approximately 10-40 acres to pre-disturbance conditions. Long-term human impacts, land use and development will be strictly controlled to manage the sites for ecological and geomorphic stability.
- Assist and encourage the Borough to develop administrative land use management strategies. These strategies should be developed to facilitate restrictions and control of human developments in at-risk landscape areas along waterways in the Matanuska-Susitna Borough. If enacted, these procedures would reduce the need for repetitive, expensive, limited-treatment-area engineering structural features.
- Addresses a public need by providing a pilot project for water, soil and wildlife resource treatment to use as a model for landowners, business and local government officials, demonstrating and educating about issues of river corridor management, zoning and land use development.

- Reduces potential costs of protecting the 3-4 acquired properties through structural treatments (i.e., spur dikes) from 2.5 million (\$625,000 x 4) dollars to \$594,000, through the use of the fee title acquisition concept.

Public and Agency Involvement

Project Sponsor

The sponsoring local organization is the Matanuska-Susitna Borough. Meetings were held between NRCS and MSB throughout the development of the EA to determine local needs and concerns regarding the project. The meetings were used to acquire data relative to the project area, ascertain the scope of the problem, begin developing alternative approaches, explain program criteria and operating procedures, develop measures to tailor the project to address local concerns and to work out other project details.

Interdisciplinary Team

An interdisciplinary team was used to acquire data and develop information for the Environmental Assessment (EA). The team included MSB representatives, engineers, an environmental specialist, a cultural resources coordinator, a resource conservationist and others. The team helped gather basic project information, developed the preliminary determinations of the environmental and social effects of the alternatives and provided input for the development of this document. Landowners and other agencies were contacted during plan development to provide needed information. Principal agency and sponsor participants are listed in Appendix D.

Public/Agency Participation

The first public discussion of the potential for the acquisition project was held at a regular meeting of the Circleview Estates Erosion Service Area on Thursday, March 2, 2006. The public comment period on this draft EA opened on April 5, 2006. Copies of the draft EA were mailed to the U.S. Fish and Wildlife Service, the U.S. Army Corps Of Engineers, Environmental Protection Agency, Alaska Department of Fish and Game and the Alaska Department of Natural Resources. Three native Alaskan tribes were also provided with a copy of the draft EA; the Native Village of Eklutna, Chickaloon Village and the Village of Knik. A formal public scoping meeting will be held on or about the 24th of April, 2006, at the Palmer Railroad Depot building. A second scoping meeting will be held if needed, based on issues discovered or comments received during the public comment period. Lists of participants will be gathered, with any questions asked by the public during the public meeting(s) and the draft EA public comment period. Notices of agency contact information, the availability of the draft EA and the public scoping meeting(s) will be published in the local newspaper, The Frontiersman, as well as the Anchorage Daily News.

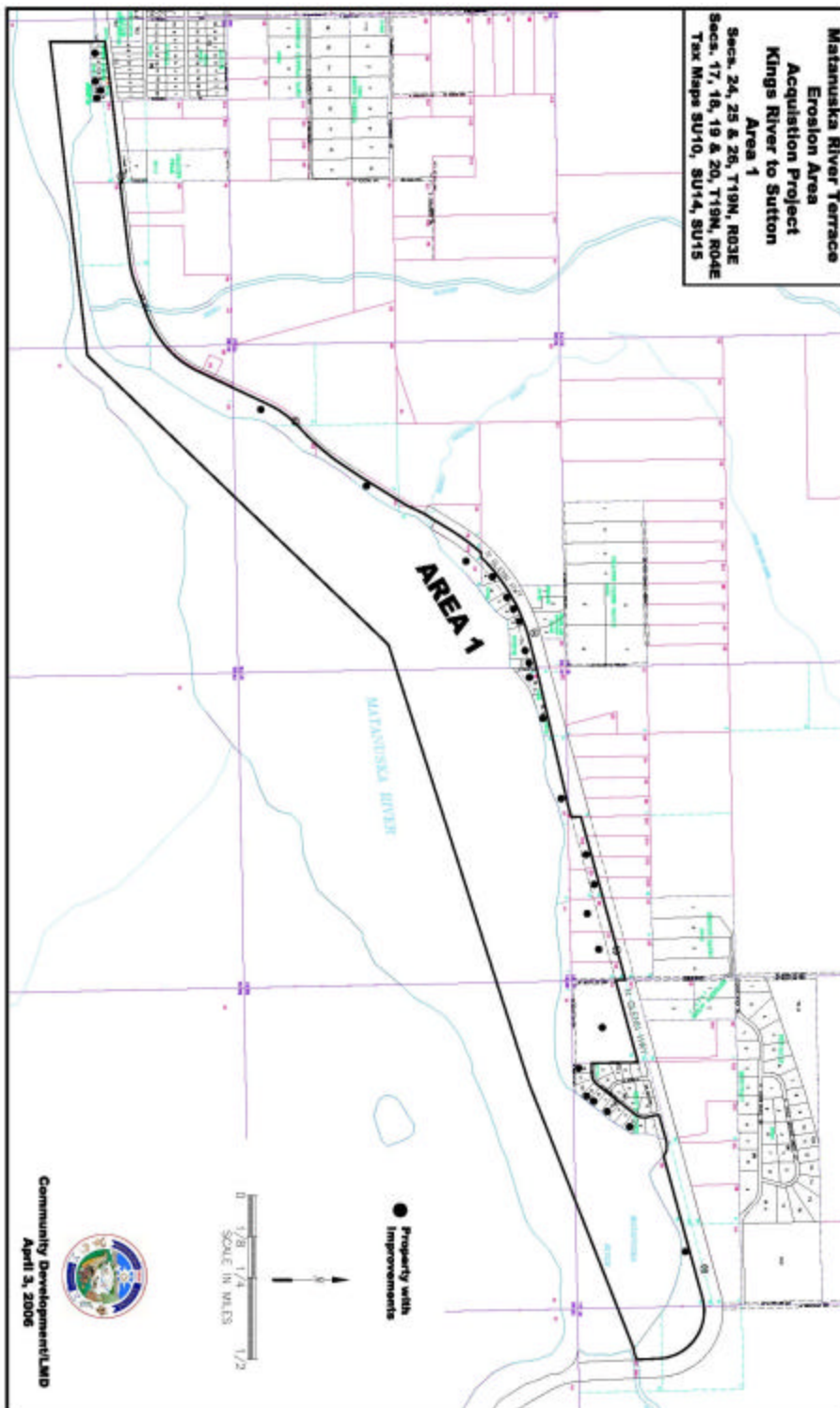
Resources

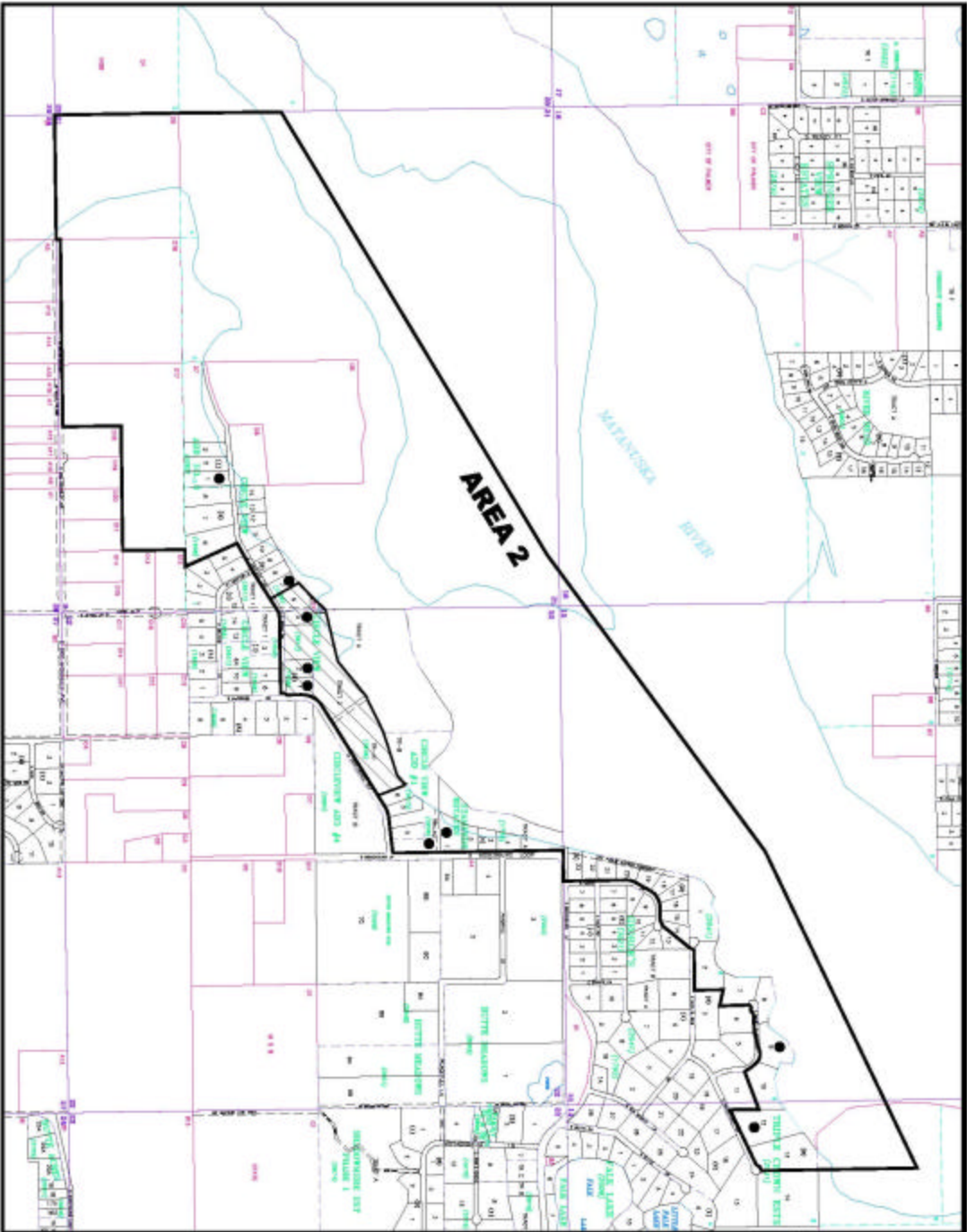
The following resources were used in the preparation of this document.

1. U.S Army Corps of Engineers, August 2003, *Background Studies for Expedited Reconnaissance Study of Matanuska River Erosion, Matanuska-Susitna Borough, Alaska*, Alaska District.
2. United States Department of Agriculture, Natural Resources Conservation Service in Cooperation with the Fairbanks North Star Borough, March 2005, *Final Implementation Plan – Environmental Assessment, Tanana River Floodplain Acquisition Project at Salcha, Alaska*, Palmer, Alaska.
3. United States Department of Agriculture, Natural Resources Conservation Service, prepared by MWH, November 2004, *Matanuska River Erosion Assessment, Design Study Report – Final, Vols. I and II*.

Appendices

Appendix A - Project Area Map (not to scale)





Matanuska River Terrace
Erosion Area
Acquisition Project
Triple Crown to Circle View,
Area 2
Secs. 14, 15, 21 & 22
T17N, R02E
Tax Maps PA11, PA13, PA14

- **Property with Improvements**
- ▨ **Protected Area Does Not Qualify for Program**



0 1/8 1/4
 SCALE IN MILES



Community Development/LMD
April 3, 2006

Appendix B – Covenant Restrictions
DRAFT
Attachment B
Matanuska River Terrace Acquisition Area, Land and Management
Covenants

The Matanuska-Susitna Borough, a municipal corporation under the laws of the State of Alaska, whose address is 350 East Dahlia Avenue, Palmer, AK, 99645, being the owner of that certain real property having been acquired under federally funded Matanuska River Terrace Erosion Protection Project, described as:

LEGAL DESCRIPTION _____

Does declare and impose these restrictive covenants for the benefit of the public upon said real property, which shall constitute a servitude upon the land so encumbered; shall run with the land in perpetuity; and shall bind the Matanuska-Susitna Borough, its heirs, successors in interest, assigns, lessees, and any other person claiming or acquiring title or interest under/ or from it as follows:

Unless authorized by United States Department of Agriculture, National Resource Conservation Service (NRCS) as a compatible use hereunder, it is expressly understood that the following activities and uses are prohibited on the terrace erosion acquisition area:

- A. Constructing any building, structure, or facility intended to remain for more than 30 days;
- B. Dumping or storing any refuse, wastes, sewage, or other debris;
- C. Initiating any activity in which a reasonable expectation would be that the terrace structural and/or vegetative stability or intact nature would be compromised, erosion encouraged or accelerated, or river contamination be the result.

All other land use activities not expressly discussed require NRCS concurrence. Only activities consistent with native vegetation and the primary protection and enhancement of the terrace and riparian area functions and values are possible for land use activity consideration.

Required Allowances for United States Government Management and Oversight:

1. Management Activities. NRCS shall have the right to enter onto the properties to undertake, at its own expense or on a cost-share basis with MSB or other entity, any activities to restore, protect or enhance, the terrace area for purposes of terrace geomorphic and vegetative stability and health and for periodic monitoring of the terrace erosion acquisition areas. All cost-share with the MSB shall be by written agreement only.
2. Public Access. NRCS shall have the right to regulate or prohibit public access to the terrace erosion acquisition areas upon its determination that such use is injurious to the land or incompatible with protection of the terrace easement area.
3. Government Access. NRCS shall have the right of ingress and egress to the terrace erosion acquisition area, for the exercise of any of the rights of the United States under this agreement. The authorized representatives of NRCS may use vehicles and other reasonable modes of transportation for access purposes.
4. Rules of Construction and Special Provisions. All rights in the terrace erosion area to develop the real property not reserved by the MSB shall be deemed acquired by the United States. Any ambiguities shall be

construed in favor of the United States to affect the terrace erosion area protection purposes for which this agreement is constructed.

This declaration is made pursuant to Matanuska-Susitna Borough Ordinance Serial No. # adopted by the Matanuska-Susitna Borough Assembly and the Co-Operative Agreement #_____ date_____, between the NRCS and the MSB.

Signed this _____ day of _____, 2006

Matanuska-Susitna Borough

ATTEST:

John Duffy, Borough Manager

Michelle McGee, C.M.C., Borough Clerk

(seal)

Appendix C – Ranking Criteria

Ranking Criteria Matanuska River Terrace Erosion Area Acquisition Pilot Project

General

Ranking is based on primary and secondary criteria.

- Primary criteria will establish priority based on property location (eligible zones within the 2006 pilot project implementation area).
- Secondary criteria will rank applicants within each priority location.
 - Generally priority is set from highest to lowest feature category in the following order: (see definitions section for details)

The distance to the active erosion zone for:

- potential loss of occupied building (residential)
- potential loss occupied building (business)
- potential loss/ damage to structures/ facilities only (wells, septic systems, etc), especially where corrective measures are expensive or difficult to implement

Acquisition Area

Acquisition Area 1 – Kings River to Sutton

Acquisition Area 2 – Triple Crown to Circle View

Priority Feature Location (starting with A as highest priority)

- A** Acquisition Area 1, 2 – Occupied Building Residential
- B** Acquisition Area 1, 2 – Occupied Building Business
- C** Acquisition Area 1, 2 – Other structures/facilities

Secondary Ranking Criteria

- Distance to Matanuska River (Priority Feature Locations A, B) - A ranking factor will be applied. Distance of priority category feature to the nearest actively eroding streambank zone of the Matanuska River will be determined by NRCS as follows:

$$RV = ds$$

where:

RV = rating value

ds = distance to actively eroding Matanuska River streambank zone from occupied building or other eligible designated feature.

- Distance of actively eroding streambank zone to other structures/facilities (Priority Category Feature C Locations) - highest priority within each Priority Location will be based on the distance from the structures/facilities to the actively eroding streambank zone (higher priority to buildings than to septic, wells, tanks*).
- Ties in ranking for all locations and priorities will be awarded to the earliest received applications based on postmark and date/time stamped in the receiving office.

Rating Value (RV) score: The lower the value, the higher the priority.

(* see explanation/details in definitions section)

Imminence Clause: Due to the vagaries and unpredictable nature of short-term river movement and adjustments, it is necessary to establish a mechanism by which “on-the-fly” changes in priority property acquisition can be made. In the event of the imminent loss of an occupied residential building property, which was not identified as a priority (for whatever reason), NRCS reserves the right to reassign a priority acquisition to a more imminently at-risk site. The only exercise of this clause will be at a time and location, where the routine priority assignment method was unable to anticipate an unforeseen river character change which caused a shift in the active eroding zone. This clause, as with all other potential property acquisitions, is strictly limited to the availability of current project funds. This clause does not apply once a purchase agreement is signed by the seller and accepted by the Borough.

Other Considerations – Post Application

- If a site is a high priority for funding, a Phase I Environmental Site Assessment and a pre-demolition assessment will be performed by an MSB contractor. Application may be denied if environmental hazards are found. The acceptance of any contamination, evidenced by the reports, is at the sole discretion of the NRCS. NRCS will coordinate with the MSB and Alaska DEC to determine whether the contamination is below the required monitoring and reporting level for the substances identified, and therefore for the structure/feature to remain eligible for program inclusion. Any additional cost of remediation and cleanup shall be deducted from the fair market value stated in the appraisal.
- If the hazardous site is not acceptable to the NRCS, it may be remediated according to all applicable local, state and federal regulations the landowner may re-apply in a subsequent application period, if any. Certification from DEC is required to verify “no further action is needed.”
- If a site is a high priority for funding, a cultural resources evaluation may be required of the site. All cultural resource issues must be resolved to the satisfaction of NRCS and MSB in consultation with the State Historic Preservation Officer.

Program Rules

- Applications must be received by the MSB – Land and Resources Management Division within 15 calendar days of the programs application period.
- The appraisal must be acceptable to both parties. The fair market appraised value (subject to USPAP) of the structure/feature will be utilized, unless an otherwise agreed upon amount is offered and concurred upon between the landowner and the Borough. The agreed amount may not exceed the appraised value.
- If landowner's application is accepted, and an acquisition offer is made but declined the landowner must wait for the next application period, if any, to re-apply.
- It is the intent of the program to expend all assigned funds to the degree available and required, to acquire as many imminent at-risk properties as meets program eligibility. In the event funds remain available that only partially fund an additional priority eligible property or category feature acquisition, the currently available fund amount will be offered. Neither NRCS nor the Borough is under any obligation or requirement to fully fund any unspecified remaining value of the acquisition beyond the current project available funds.

- An exclusion area is identified in the Circle View Estates subdivision, which is currently protected by the hard structure features known as Spurdikes # 1-4. No properties or category features from this identified zone will be eligible.
- Other sites determined by NRCS to contain hazardous or toxic materials beyond state and federal guidelines for allowable levels of contaminants, are ineligible for federal acquisition funding.

Definitions

- Occupied building residential means the residence is occupied as a primary residence for at least 90 days before the date of application.
- Occupied building business means the business is occupied, licensed and operating at least 5 days per week for at least 90 days before the date of application.
- Other structures/facilities means unoccupied buildings and facilities such as seasonal homes, barns, sheds, storage units, wells, septic systems and storage tanks. Buildings and other structures without a permanent foundation do not qualify for purchase, they may be moved at owners expense.
- Distance to the active erosion zone – the active erosion zone is the edge of the top of the streambank, closest to an eligible domicile or other eligible property category determined by horizontal distance, where the most likely threat of bank loss is occurring from river water. This will be determined exclusively by NRCS. The date of the measurement for the active erosion zone will be between June 15th and July 15th, 2006, solely decided upon at NRCS discretion.
- The methodology for determining the point of the structure/feature from which to measure, to the actively eroding bank is based on potential environmental hazard to the Matanuska River and loss of economic capital. Houses, fuel tank and facilities rank above septic systems for measuring purposes. Point determination is as follows:
 - When the nearest structure/feature to the actively eroding zone is a residential or occupied business building, the closest edge of the house to the river will be used.
 - When the nearest structure/feature to the actively eroding zone is a fuel tank, the closest edge of the breathing tube will be used.
 - When the nearest structure/feature to the actively eroding zone is a septic system component, the closest edge of the pump-out will be used.

Appendix D - Principal Participants

USDA-NRCS

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William Wood - NRCS Palmer AK, State Office, State Biologist, NEPA Coordinator
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Matanuska Susitna Borough

Dave Heier - Mat-Su Borough, Palmer, AK, Real Estate Acquisition Officer
(907) 745-9579

Appendix E – Area Photo's

Circle View Estates 2004-2005 (Eligibility Area 2) Photo credit – Frankie Barker, Palmer SWCD





